

in which P_{VL} is the proximity needed for far vision and A'_i , A''_i are the coefficients of the various polynomials depending on the value of the proximity addition $\delta_1 = A_{DD}$ corresponding to the degree of presbyopia of the wearer, the values of these coefficients being substantially as follows:

<u>for $A_{DD} = 1.5$ D:</u>	
$A'_0 = 12.532267$	$A''_0 = 16.9452$
$A'_1 = -92.695892$	$A''_1 = -106.8394$
$A'_2 = 305.16919$	$A''_2 = 302.62347$
$A'_3 = -513.44922$	$A''_3 = -443.97601$
$A'_4 = 476.63852$	$A''_4 = 362.53815$
$A'_5 = -247.99097$	$A''_5 = -166.29979$
$A'_6 = 67.868942$	$A''_6 = 40.015385$
$A'_7 = -7.6131396$	$A''_7 = -3.9203446$
<u>for $A_{DD} = 2$ D:</u>	
$A'_0 = 23.56555$	$A''_0 = 14.368889$
$A'_1 = -182.77804$	$A''_1 = -87.219223$
$A'_2 = 605.05684$	$A''_2 = 244.35987$
$A'_3 = -1\ 024.1053$	$A''_3 = -337.92626$
$A'_4 = 962.99613$	$A''_4 = 241.37509$
$A'_5 = -511.24120$	$A''_5 = -85.757212$
$A'_6 = 143.7355$	$A''_6 = 12.008102$
$A'_7 = -16.663562$	
<u>for $A_{DD} = 2.5$ D:</u>	
$A'_0 = -28.307575$	$A''_0 = 2.874459$
$A'_1 = 190.37743$	$A''_1 = 11.541159$
$A'_2 = -445.545294$	$A''_2 = -35.715782$
$A'_3 = 512.44763$	$A''_3 = 37.849808$
$A'_4 = -315.3125$	$A''_4 = -19.0199096$
$A'_5 = 99.678413$	$A''_5 = 4.2867818$
$A'_6 = -12.731333$	$A''_6 = -0.28934118$
<u>for $A_{DD} = 3$ D:</u>	
$A'_0 = 22.19555$	$A''_0 = 57.071102$
$A'_1 = -157.74065$	$A''_1 = -357.09277$
$A'_2 = 529.74104$	$A''_2 = 1\ 000.8899$
$A'_3 = -918.56382$	$A''_3 = -1\ 509.5112$
$A'_4 = 881.73279$	$A''_4 = 1\ 311.576$
$A'_5 = -475.73774$	$A''_5 = -657.94254$
$A'_6 = 135.48897$	$A''_6 = 177.01095$
$A'_7 = -15.888513$	$A''_7 = -19.763759$

and, for possible intermediate additions whose value δ is between two above-mentioned addition values δ_1 and $\delta_1 + 0.5$, the envelope curves of these intermediate additions are deduced from the envelope curves corresponding to δ_1 and $\delta_1 + 0.5$ by the equations:

$$P_{inf}^{\delta}(h) = \left(\frac{\delta - \delta_1}{0.5} \right) \Delta P_{inf} + P_{inf}^{\delta_1}$$

$$P_{sup}^{\delta}(h) = \left(\frac{\delta - \delta_1}{0.5} \right) \Delta P_{sup} + P_{sup}^{\delta_1}$$

$$\text{with } \Delta P_{inf} = P_{inf}^{\delta_1+0.5} - P_{inf}^{\delta_1}$$

$$\Delta P_{sup} = P_{sup}^{\delta_1+0.5} - P_{sup}^{\delta_1}$$

2. Optical lens according to claim 1 wherein the curve representative of its proximity satisfies the following equation:

$$P_{nom} = f(h) = (\Sigma A_i h^i) + P_{VL}$$

with, subject to the same conditions as previously:

<u>for $A_{DD} = 1.5$ D:</u>	
$A_0 = 1.8983333$	
$A_1 = -3.8368794$	
$A_2 = 17.797017$	
$A_3 = -34.095052$	
$A_4 = 28.027344$	
$A_5 = -10.464243$	
$A_6 = 1.464837$	
$A_7 = 0$	
<u>for $A_{DD} = 2$ D:</u>	
$A_0 = 12.637321$	
$A_1 = -85.632629$	
$A_2 = 269.61975$	
$A_3 = -425.09732$	
$A_4 = 361.26779$	
$A_5 = -168.43481$	
$A_6 = 40.408779$	
$A_7 = -3.8719125$	
<u>for $A_{DD} = 2.5$ D:</u>	
$A_0 = -12.716558$	
$A_1 = 100.95929$	
$A_2 = -240.63054$	
$A_3 = 275.14871$	
$A_4 = -167.1658$	
$A_5 = 51.982597$	
$A_6 = -6.5103369$	
<u>for $A_{DD} = 3$ D:</u>	
$A_0 = 39.633326$	
$A_1 = -257.41671$	
$A_2 = 765.31546$	
$A_3 = -1\ 214.0375$	
$A_4 = 1\ 096.6544$	
$A_5 = -566.84014$	
$A_6 = 156.24996$	
$A_7 = -17.826136$	

3. Optical lens according to claim 1 wherein the local value of the proximity gradient dP/dh does not exceed 5 diopters per millimeter continuously over a proximity range greater than 0.25 diopters.

4. Optical lens according to claim 1 wherein the mean proximity gradient G_{VP} for near vision and the mean proximity gradient G_{VL} for distant vision are related as follows:

$$G_{VP}/G_{VL} > 2.$$

5. Ophthalmic lens according to claim 1 wherein the surface S_{VP} of the transition area contributing usefully to near vision and the surface S_{VL} of the transition area contributing usefully to far vision are related as follows:

$$S_{VL}/S_{VP} \geq 3.$$

* * * * *